

## Dr. rer. nat. Johannes Maria Auth



Postdoc – Modeling and Simulation of  
Biological Processes – University of Augsburg

### Role in LiSyM-Cancer

- SMART-NAFLD > WP4 “Multiomics Analysis of MASLD Progression”

### Expertise

- Biomedical Data Science (Multiomics Data Analysis, Computational Modeling)
- Molecular Genetics (Cell Culture, Flow Cytometry, Proximity Ligation Assays)
- Theoretical Neuroscience (Computational & Mathematical Modeling)

### Professional Experience

- Since 2024, Postdoc - Chair of Simulation and Modeling of Biological Processes, Augsburg University, Augsburg, Germany
  - Supervisor: Prof. Dr. Andreas Raue

## Degrees

- **PhD**

2019-2024, Weizmann Institute of Science, Rehovot, Israel

PhD thesis in Molecular Genetics:

*Asymmetric Crosstalk Between the BMP and TGF- $\beta$  Pathways Resolves Signaling Ambiguity*

- Supervisor: Dr. Yaron Antebi

- **PhD**

2017-2019, Weizmann Institute of Science, Rehovot, Israel

PhD thesis in Theoretical Neuroscience:

*Modeling Input-Dependent Memory Segmentation with Hebbian Cell Assemblies* (discontinued)

- Supervisor: Prof. Dr. Misha Tsodyks

- **Master of Science**

2012-2016, Georg-August-University, Göttingen

Master thesis in Biophysics & Complex Systems:

*The Influence of Different Learning Strategies on the Self-Organized Formation of Hebbian Cell Assemblies*

- Supervisor: Dr. Christian Tetzlaff

- **Bachelor of Science**

2008-2011, Georg-August-University, Göttingen

Bachelor thesis in Physics at the Max-Planck-Institute for Dynamics and Self-Organization, Göttingen:

*Pairwise Signal Correlation in Neuronal Networks*

- Supervisor: Prof. Tatjana Tchumatchenko

## Honors and Awards (selection)

- 2022, Anita Roberts Memorial Travel Award: Best Abstract by a Graduate Student to the TGF- $\beta$  Superfamily Conference
- 2017-2019, Minerva Foundation Doctoral Fellowship, German-Israeli Scientific Cooperation of the Max-Planck-Society